PROGRAMMABLE AND ADAPTIVE TEMPORAL
FILTER FOR VIDEO ENCODING

Abstract of the Disclosure

A technique is provided for programmably and adaptively temporally filtering pixel values of frames of a sequence of video frames. The technique includes determining a pixel value difference between a pixel of a current frame and a corresponding pixel of a temporally previous frame; and adaptively filtering the pixel of the current frame using a selected filter coefficient. The filter coefficient is selected employing the pixel value difference. For example, multiple thresholds could be employed to differentiate between multiple filter coefficients, with the pixel value difference being employed to determine which filter coefficient is selected for the adaptive filtering. The thresholds and the filter coefficients can also be programmable. Further, the temporal filter can be integrated with a repeat field detection unit of a motion video encoder in order to conserve memory bandwidth.